



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/044,639

01/10/2002

Tor Jan Akerlund

MRKS/0032.C1/WBP

9370

36735

7590

03/10/2006

PATTERSON & SHERIDAN, L.L.P.
3040 POST OAK BOULEVARD, SUITE 1500
HOUSTON, TX 77056

EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT

PAPER NUMBER

3672

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/044,639	Applicant(s) AKERLUND, TOR JAN	
	Examiner Jennifer H. Gay	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24, 50-55, 57, 60, 61, 70-82 and 94-99 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-24, 50-55, 57, 60, 61, 70-82 and 94-99 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 8-15, 18, 19, 21-24, 50-55, 57, 60, 61, 70-82 and 94-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over McArthur (US 4,652,195) in view of Kelly (US 3,881,375).

Regarding claim 1: McArthur discloses an apparatus for positioning a wellbore tool for moving tubing joints. The apparatus includes the following features:

- A boom **130** with the tong **170** attached to the end thereof.
- An actuating member **150** for changing the length of the extendable boom. The boom and the actuating member have substantially parallel longitudinal axes.
- A mounting assembly **30** that is coupled to an opposite end of the extendable boom. The mounting assembly includes a bearer **32** coupled to a single location of a support beam **26** for coupling the extendable boom to a drilling tower **12**.

McArthur discloses all of the limitations of the above claims except for the tool being a tong capable of making up or breaking out tubulars.

Kelly discloses a movable wellbore tool that is a tong capable of making up or breaking out tubulars.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur such that the tool was a tong as taught by Kelly in order to have eliminated the need for an operator to

perform the separate step of making up or breaking out the tubulars once they are put into position.

Applicant is reminded that “[i]n considering in the disclosure of a reference, it is proper to take into account not only specific teachings of a reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Pedra*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claims 2, 5: The boom is telescoping with an inner and outer barrel.

Regarding claims 3, 4, 18, 19: The boom of is movable both horizontally and vertically with respect to Figure 2.

Regarding claims 8, 12: The mounting assembly includes a carriage **38** pivotally attached to the bearer with a portion of the outer barrel disposed on the carriage (Figure 2).

Regarding claims 9, 24: The tong is movably attached to the inner barrel via a pivot **172, 174**.

Regarding claims 10, 13, 14: A clamp assembly **72** for releasable connecting the outer barrel to the carriage.

Regarding claim 11: The outer barrel is movable between a first and second position relative to the carriage.

Regarding claims 21-23: The actuating member includes a piston and cylinder assembly **150** disposed on the boom for moving the boom between an extended and retracted position.

Regarding claim 50: McArthur discloses an apparatus for positioning a wellbore tool for moving tubing joints. The apparatus includes the following features:

- A boom **130** with the tong **170** attached to the end thereof.
- A motive assembly **150** having an extendable member for changing the length of the extendable boom.
- A mounting assembly **30** for coupling the extendable boom to a single location on a drilling tower **12**.

McArthur discloses all of the limitations of the above claims except for the tool being a tong capable of making up or breaking out tubulars.

Kelly discloses a movable wellbore tool that is a tong capable of making up or breaking out tubulars.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur such that the tool was a tong as taught by Kelly in order to have eliminated the need for an operator to perform the separate step of making up or breaking out the tubulars once they are put into position.

Applicant is reminded that “[i]n considering in the disclosure of a reference, it is proper to take into account not only specific teachings of a reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Pedra*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claims 51, 81: The tool is movably attached to the inner barrel via pivot points **172, 174**.

Regarding claims 52, 82: The motive assembly includes a piston and cylinder assembly **150**.

Regarding claims 53 and 55: The boom of is movable both horizontally and vertically with respect to Figure 2.

Regarding claim 54: The boom is slidable along the mounting assembly between a first and second position.

Regarding claim 57: The boom is telescopic.

Regarding claims 60, 61: As seen in Figure 2, the center of mass of the gripping assembly is aligned with the central axis of the boom.

Regarding claim 70: McArthur discloses a method for engaging a first and second tubular using the above apparatus. The method involves the following steps:

- Positioning the apparatus on a drilling tower.
- Actuating the extendable boom to move the tool toward the well center from a first to a second position by varying the length of the tool.
- Engaging the first and second tubulars with the tool.

McArthur discloses all of the limitations of the above claims except for the tool being a tong capable of making up or breaking out tubulars.

Kelly discloses a movable wellbore tool that is a tong capable of making up or breaking out tubulars.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur such that the tool was a tong as taught by Kelly in order to have eliminated the need for an operator to perform the separate step of making up or breaking out the tubulars once they are put into position.

Applicant is reminded that “[i]n considering in the disclosure of a reference, it is proper to take into account not only specific teachings of a reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Pedra*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claim 71: A support member **26** is attached to the drilling tower.

Regarding claim 72: The apparatus is coupled to the support member.

Regarding claim 73: The tong of Kelly connects a first and second tubular by rotating the first relative to the second.

Regarding claims 74, 75: The mounting assembly is releasably clamped to the support member via bolts **36**.

Regarding claim 76: McArthur discloses an apparatus for positioning a wellbore tool for moving tubing joints. The apparatus includes the following features:

- A boom **130** with the tong **170** attached to the end thereof.
- A motive assembly **150** for changing the length of the extendable boom. The motive assembly and boom have substantially parallel axes.
- A mounting assembly **30** that is coupled to an opposite end of the extendable boom to couple the boom to a single location of a support beam **26** for coupling the extendable boom to a drilling tower **12**.

McArthur discloses all of the limitations of the above claims except for the tool being a tong capable of making up or breaking out tubulars.

Kelly discloses a movable wellbore tool that is a tong capable of making up or breaking out tubulars.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur such that the tool was a tong as taught by Kelly in order to have eliminated the need for an operator to perform the separate step of making up or breaking out the tubulars once they are put into position.

Applicant is reminded that “[i]n considering in the disclosure of a reference, it is proper to take into account not only specific teachings of a reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Pedra*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claim 77: The beam is selectively attached to the drilling tower as any welded piece of metal can be removed from the parts it is attached to.

Regarding claim 78: The mounting assembly is clamped to the support beam that is convenient.

Regarding claim 80: McArthur discloses all of the limitations of the above claims except for the support beam being located between 2 and 3 meters above the rig floor. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have placed the support beam of McArthur between 2 and 3 meters from the rig floor, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 94, 96: The support member is a beam of the drilling tower.

Regarding claim 95: The first end of the actuating member is coupled to the outer barrel and the second end is coupled to the inner barrel.

Regarding claim 97: The boom is clamped to the support beam via at least one bolt 36.

Regarding claim 99: The step of actuating the boom involves extending the actuating member thereby extending the boom.

Art Unit: 3672

3. Claims 6, 7, 16, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McArthur in view of Kelly as applied to claims 5 and 15 above, and further in view of Swoboda, Jr. et al.

Regarding claims 6, 7, 16, and 17: McArthur and Kelly discloses all of the limitations of the above claims except for the boom including an intermediate barrel where the inner barrel is mounted in the intermediate barrel and the intermediate barrel is mounted in the outer barrel.

Swoboda, Jr. et al. discloses a wellbore tool positioning device similar to that of Kelly. Swoboda, Jr. et al. further teaches using a boom with three barrels.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the device of McArthur in view of Kelly to include an intermediate barrel as taught by Swoboda, Jr. et al. in order to have extended the reach of the tong. The more barrels that the boom included, the further from the support member the boom could have reached.

Regarding claim 20: McArthur and Kelly discloses all of the limitations of the above claims except for to apparatus including a motor.

Swoboda, Jr. et al. further teaches using a motor to 90 to adjust he position of the boom relative to a mounting assembly.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur in view of Kelly to include a motor as taught by Swoboda, Jr. et al. in order to have provided a means for controlling the hydraulic actuating pistons automatically and without operator intervention.

Response to Arguments

4. Applicant has argued that WO 95/106868 (Lorenz) does not teach the limitations added to claims 1, 50, 70, and 76. The examiner agrees with this assessment and has withdrawn the rejection of the above claim and the claims depending therefrom over Lorenz.

5. Applicant's arguments filed January 17, 2006 have been fully considered but they are not persuasive.

Applicant has argued that the tong of Kelly is one, positioned on a vertical column on the floor of a rig, and two, engages the pipe after the pipe sections have already been stabbed into each other.

With regards to the first argument, the examiner notes that applicant is arguing Kelly as if applied under 35 USC 102 instead of 35 USC 103. Kelly is not required to teach all of the elements of the rejected claim but merely the feature for which the reference has been applied. In this instance Kelly was used to teach the placement of a wellbore tong system on the end of an extendable structure which Kelly clearly teaches. McArthur teaches a tubular positioning apparatus that is located on a support member of a derrick.

With regards to the second argument, the examiner notes that the claims do not require that the tong and extendable structure be used to not only connect pipe sections but stab the sections together. The claims merely require connecting the sections.

Applicant has argued that McArthur does not teach making up or breaking out pipe sections. While the examiner agrees, again applicant is arguing the references as applied under 35 USC 102 instead of 35 USC 103. In this instance Kelly has been used to teach the use of a wellbore tong system on the end of an extendable structure.

Applicant has further argued that McArthur teaches away from combination with Kelly because it teaches using a separate wrenching apparatus to make up the tubulars instead of the stabbing apparatus. While a separate wrenching apparatus is taught, it is this teaching that leads to the motivation for combining the references as a positionable tong would eliminate the need for a separate wrenching apparatus.

Applicant has argued that the examiner has merely used hindsight to combine McArthur and Kelly. The motivation to combine the references is inferred as the elimination of a separate wrenching apparatus would not only reduce the equipment necessary to make up and break down pipe sections but would also reduce the operators needed on the rig floor. These features would reduce the cost of the rig as well as increase the safety of the rig.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

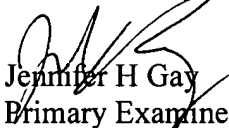
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer H Gay
Primary Examiner
Art Unit 3672

JHG 
March 6, 2006